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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/580,268

05/25/2006

Simone Bizzarri

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EXAMINER

GEBRESILASSIE, KIBROM K

ART UNIT

PAPER NUMBER

2128

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,268	Applicant(s) BIZZARRI ET AL.	
	Examiner KIBROM K. GEBRESILASSIE	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/25/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to amended application filed on 05/25/2006.
2. Claims 1-21 have been canceled.
3. Claims 22-42 are presented for examination.

Response to Amendment

4. Applicant's preliminary amendment to specification, abstract and claims are considered and entered.

Priority

5. Acknowledgment is made of applicant's claim for a benefit of National stage application No. PCT/IT2003/000783 (filed November 27, 2003) under 35 USC 120, 121, or 365(c).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 24, 25, and 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. As per claim 24, it is unclear what does it mean by "simulated user"?
- b. As per claim 25, what is the difference between "guaranteed transfer speed" and "maximum transfer speed"? If there is a "a maximum transfer speed", then it is obvious to have a "guaranteed transfer speed"? Also, how the "guaranteed" and "maximum" transfer speeds measured? How maximum? How

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one of ordinary skill knows this is “guaranteed transfer speed” and this one is “maximum transfer speed”? What are the thresholds to say “guaranteed” or “maximum” transfer speeds?

c. As per claim 40, claim 40 depends on claim 31, wherein claim 31 is a “method” claim. However, claim 40 recites “an object for simulating”, which has different statutory category than of claim 31 and therefore improper dependent.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 22-42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

d. As per Claims 22-42, Claims are rejected under 35 U.S.C. 101 as being directed to nonstatutory subject matter since the claims as a whole appears to result in a mere manipulation of profile and therefore would not provide for a practical application, as evidenced by lack of physical transformation or a useful, tangible, and concrete result.

For example, claim 22 recites “network services or service profile”, but the services are not specific services. The claim did not specify any particular type or nature of the services; nor did it specify how or from where the services was obtained or what the services represented or used for. Therefore, Claims as a whole represent mere abstraction; i.e. a disembodied an abstract concept

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representing nothing more than an “abstract idea” which as a whole do not provide a real world result and therefore would not provide a practical application.

e. As per Claims 31-39, claims do not seem to require any **hardware** or physical components to perform its function. As such, the claims appear to be a **system of software per se** and are therefore non-statutory. A claim that recites a piece of software alone without any link to a hardware component is directed to non-statutory subject matter since there is no relationship between the computer software and hardware components which permits the functionality of the software to be realized.

f. As per Claims 40, and 41, claims fail to fall within one of the four enumerated categories of patentable subject matter recited in 35 USC 101 (i.e. process, machine, manufacture, or composition of matter).

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 22-25, 28-34, and 37-42 are rejected under 35 U.S.C. 102(b) as being anticipated by US Publication No. 2002/0145982 issued to Talpade et al.

12. As per Claims 1-21 (Cancelled).

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13. As per Claim 22, Talpade et al discloses a method for simulating a communications network through objects that model respective network devices, comprising the steps of:

simulating through said objects the supply of network services according to respective quality of service profiles (such as...*simulator may simulate the classes of traffic and determine QoS mechanisms based on the simulation...*; See: [0025]);

selectively identifying at least one quality of service profile (such as...*identifying the classes of traffic and associated QoS criteria, the ISP may identify a set of applications...each class of traffic may support one or more applications,...application may include voice-over IP, Web TCP...*; See: [0024]); and

dynamically configuring said objects to simulate the supply of the service corresponding to said selectively identified quality of service profile (such as...*based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes...(See: [0029])...the simulation environment in simulator may be configured based on the network model, the source models, and the chosen simulation variables...(See: [0037])*).

14. As per Claim 23, Talpade et al discloses the method according to claim 22, comprising the step of inserting, for at least one network user, a respective parameter related to a particular respective quality of service profile (such as...*determine a set of*

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QoS mechanisms, simulator may then determine the associated parameters of each of the QoS mechanisms...; See: [0026]).

15. As per Claim 24, Talpade et al discloses the method according to claim 23, comprising the steps of: selectively associating to a plurality of network users respective quality of service profiles (See: [0034]); and performing at least one simulation in which every simulated user uses a different service from that used by other users of said plurality (See: [0038]).

16. As per Claim 25, Talpade et al discloses the method according to claim 22, wherein the steps are applied for simulating networks comprising mobile terminals, said quality of service profile comprising parameters chosen from the group of: traffic class, maximum transfer time of a data unit, guaranteed transfer speed for data transmitted by mobile terminal toward the network, maximum transfer speed for data transmitted from mobile terminal toward the network, guaranteed transfer speed for data transmitted by the network toward a mobile terminal, and maximum transfer speed for data transmitted by the network toward a mobile terminal (such as...*admission controller may determine if there is sufficient bandwidth available to establish the requested flow....further determine the available bandwidth on the links in the determined path. If the available bandwidth is greater than or equal to the requested bandwidth...; See: [0028], [0029], [0030], and [0032]).*

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17. As per Claim 28, Talpade et al discloses the method according to claim 23, wherein the steps are applied for simulating networks comprising mobile terminals cooperating with blocks responsible for starting the connection, wherein, in case of simulation of a call originated from a terminal, said parameter is specified by said terminal to said blocks during the procedure for starting the connection (such as...*when the first customer site wishes to communicate with another customer site, the first customer site may send to the admission controller a request for connection...*(See: [0028])...*based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes...*; See: [0030]).

18. As per Claim 29, Talpade et al discloses the method according to claim 23, wherein the steps are applied for simulating networks comprising mobile terminals cooperating with blocks responsible for starting the connection, wherein, in case of simulation of a terminated call toward a determined network terminal, comprises the step of taking said parameter from the terminal object of the call, said taking step being performed by said blocks responsible for starting the connection (such as...*when the first customer site wishes to communicate with another customer site, the first customer site may send to the admission controller a request for connection...*(See: [0028])...*based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes...*; See: [0030]).

19. As per Claim 30, The method according to claim 22, wherein the steps are applied for simulating networks comprising mobile terminals cooperating with network devices, comprising, in case of simulation of a terminated call on a mobile terminal, the step of sending the indication of connection start beginning from simulated network devices omitting the indication of what quality of service profile to use and obtaining said profile from the mobile terminal to which the call is directed (such as...*when the first customer site wishes to communicate with another customer site, the first customer site may send to the admission controller a request for connection...(See: [0028])...based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes...;* See: [0030]).

20. As per Claim 31, Talpade et al discloses a system for simulating a communications network through objects that model respective network devices, in which said objects simulate the supply of network services according to respective quality of service profiles, comprising objects that are dynamically configurable to simulate the supply of services corresponding to selectively identified quality of service profiles (such as...*based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes...(See: [0029])...the simulation environment in*

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simulator may be configured based on the network model, the source models, and the chosen simulation variables...(See: [0037]).

21. As per Claims 32-34 and 37-42, the instant claims recite substantially same limitation as the above rejected claims 22-25, and 28-30, and therefore rejected under the same rationale.

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

23. Claims 26, 27, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication No. 2002/0145982 issued to Talpade et al in view of US Publication No. 2003/0100299 issued to Ko et al.

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24. As per Claim 26, Talpade et al discloses the method according to claim 23, wherein the steps are applied for simulating networks comprising mobile terminals connected through radio interfaces, comprising respective control modules of calls, the method comprises the step of directly sending said parameter from said control module of the mobile terminal toward the control module of the switching centre in view of the forwarding of said parameter to modules of the related radio interfaces that start the connection according to the type of service pointed out in said parameter (such as...*when the first customer site wishes to communicate with another customer site, the first customer site may send to the admission controller a request for connection...*(See: [0028])...*based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes...*; See: [0030]).

Talpade et al fails expressly to disclose a switching centre. However, Ko et al discloses a switching centre (such as...*the network has a hierarchical structure in which a plurality of base station controllers is connected to Mobile services switching Centre (MSC)...*; See: Col. 1 [005]).

It would have been obvious to one ordinary skill in the art to combine the teaching of Ko et al with the teaching of Talpade et al because both reference concern with network performance. The motivation to do so would be able to access details of the network functionality and in particular able to determine the response of the network to an individual call (Ko et al).

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25. As per Claim 27, Talpade et al discloses the method according to claim 23, wherein the steps are applied for simulating networks comprising mobile terminals connected through radio interfaces to a network node, said mobile terminals and said network node comprising respective modules for managing the mobile terminal session and for managing the support node session, the method comprises the step of directly sending said parameter from said module for managing the mobile terminal session toward said module for managing the support node session in view of the forwarding of such parameter to the modules of the related radio interfaces that start the connection according to the type of service pointed out in said parameter (such as...*when the first customer site wishes to communicate with another customer site, the first customer site may send to the admission controller a request for connection...(See: [0028])...based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes...; See: [0030]*).

Talpade et al fails expressly to disclose packet switching call. However, Ko et al discloses a switching centre (See: Fig. 2 #212 and corresponding texts).

It would have been obvious to one ordinary skill in the art to combine the teaching of Ko et al with the teaching of Talpade et al because both reference concern with network performance. The motivation to do so would be able to access details of the network functionality and in particular able to determine the response of the network to an individual call (Ko et al).

26. As per Claims 32-42, the instant claims recite substantially same limitation as the above rejected claims 22-30, and therefore rejected under the same rationale.

27. **Support for Amendments and Newly Added Claims**, Applicants are respectfully requested, in the event of an amendment to claims or submission of new claims, that such claims and their limitations be directly mapped to the specification, which provides support for the subject matter. This will assist in expediting compact prosecution. MPEP 714.02 recites: "Applicant should also specifically point out the support for any amendments made to the disclosure. See MPEP § 2163.06. An amendment which does not comply with the provisions of 37 CFR 1.121(b), (c), (d), and (h) may be held not fully responsive. See MPEP § 714." Amendments not pointing to specific support in the disclosure may be deemed as not complying with provisions of 37 C.F.R. 1.131(b), (c), (d), and (h) and therefore held not fully responsive. Generic statements such as "Applicants believe no new matter has been introduced" may be deemed insufficient.

28. **Requests for Interview**, In accordance with 37 CFR 1.133(a)(3), requests for interview must be made in advance. Interview requests are to be made by telephone (571-272-8634) call or FAX (571-273-8634). Applicants must provide a detailed agenda as to what will be discussed (generic statement such as "discuss §102 rejection" or "discuss rejections of claims 1-3" may be denied interview). The detail agenda along with any proposed amendments is to be written on a PTOL-413A or a custom form and

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should be faxed (or emailed, subject to MPEP 713.01.I / MPEP 502.03) to the Examiner at least 3 days prior to the scheduled interview.

Interview requests submitted within amendments may be denied because the Examiner was not notified, in advance, of the Applicant Initiated Interview Request and due to time constraints may not be able to review the interview request to prior to the mailing of the next Office Action

Conclusion

29. All claims are rejected.

30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

g. WO 02/104055 issued to Barbaresi et al.

h. US 2003/0061017 issued to Dotaro et al.

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kibrom K. Gebresilassie whose telephone number is 571-272-8571. The examiner can normally be reached on 8:00 am - 4:30 pm Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini S. Shah can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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